- (1) The appointment of a radiological safety officer who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiological safety matters; and
- (2) The establishment of appropriate administrative procedures to assure:

(i) Control of procurement and use of byproduct material;

- (ii) Completion of safety evaluations of proposed uses of byproduct material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and
- (iii) Review, approval, and recording by the radiological safety officer of safety evaluations of proposed uses prepared in accordance with paragraph (b)(2)(ii) of this section prior to use of the byproduct material.

# §33.15 Requirements for the issuance of a Type C specific license of broad

An application for a Type C specific license of broad scope will be approved

- (a) The applicant satisfies the general requirements specified in §30.33 of this chapter; and
- (b) The applicant submits a statement that byproduct material will be used only by, or under the direct supervision of, individuals who have received:
- (1) A college degree at the bachelor level, or equivalent training and experience, in the physical or biological sciences or in engineering; and
- (2) At least 40 hours of training and experience in the safe handling of radioactive materials, and in the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation, and biological hazards of exposure to radiation appropriate to the type and forms of byproduct material to be used; and
- (c) The applicant has established administrative controls and provisions relating to procurement of byproduct material, procedures, record keeping, material control and accounting, and management review necessary to assure safe operations.

#### § 33.16 Application for other specific licenses

An application filed pursuant to part 30 of this chapter for a specific license other than one of broad scope will be considered by the Commission as an application for a specific license of broad scope under this part if the requirements of the applicable sections of this part are satisfied.

### §33.17 Conditions of specific licenses of broad scope.

- (a) Unless specifically authorized pursuant to other parts of this chapter, persons licensed under this part shall
- (1) Conduct tracer studies in the environment involving direct release of byproduct material;
- (2) Receive, acquire, own, possess, use, transfer, or import devices containing 100,000 curies or more of byproduct material in sealed sources used for irradiation of materials;
- (3) Conduct activities for which a specific license issued by the Commission under part 32, 34, or 35 of this chapter is required; or
- (4) Add or cause the addition of byproduct material to any food, beverage, cosmetic, drug, or other product designed for ingestion or inhalation by, or application to, a human being.
- (b) Each Type A specific license of broad scope issued under this part shall be subject to the condition that byproduct material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety committee.
- (c) Each Type B specific license of broad scope issued under this part shall be subject to the condition that byproduct material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiological safety officer.
- (d) Each Type C specific license of broad scope issued under this part shall be subject to the condition that byproduct material possessed under the license may only be used by, or under the direct supervision of, individuals who satisfy the requirements of §33.15 of this part.

# § 33.21

## VIOLATIONS

# §33.21 Violations.

- (a) The Commission may obtain an injunction or other court order to prevent a violation of the provisions of—
- (1) The Atomic Energy Act of 1954, as amended;
- (2) Title II of the Energy Reorganization Act of 1974, as amended; or
- (3) A regulation or order issued pursuant to those Acts.
- (b) The Commission may obtain a court order for the payment of a civil penalty imposed under section 234 of the Atomic Energy Act:
  - (1) For violations of-
- (i) Sections 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Atomic Energy Act of 1954, as amended;
- (ii) Section 206 of the Energy Reorganization Act;
- (iii) Any rule, regulation, or order issued pursuant to the sections specified in paragraph (b)(1)(i) of this section:
- (iv) Any term, condition, or limitation of any license issued under the sections specified in paragraph (b)(1)(i) of this section.
- (2) For any violation for which a license may be revoked under section 186 of the Atomic Energy Act of 1954, as amended.

[57 FR 55073, Nov. 24, 1992]

# § 33.23 Criminal penalties.

- (a) Section 223 of the Atomic Energy Act of 1954, as amended, provides for criminal sanctions for willful violation of, attempted violation of, or conspiracy to violate, any regulation issued under sections 161b, 161i, or 161o of the Act. For purposes of section 223, all the regulations in part 33 are issued under one or more of sections 161b, 161i, or 161o, except for the sections listed in paragraph (b) of this section.
- (b) The regulations in part 33 that are not issued under sections 161b, 161i, or 161o for the purposes of section 223 are as follows: §§33.1, 33.8, 33.11, 33.12, 33.13, 33.14, 33.15, 33.16, 33.21, 33.23 and 33.100.

[57 FR 55073, Nov. 24, 1992]

#### **SCHEDULES**

#### §33.100 Schedule A.

Schedule A.		
Byproduct material	Col. I curies	Col. II curies
Antimony-122	1	0.01
Antimony-124	1	.01
Antimony-125	1 10	.01 .1
Arsenic-73	10	.01
Arsenic-76	1	.01
Arsenic-77	10	.1
Barium-131	10 1	.1 .01
Bismuth-210	.1	.001
Bromine-82	10	.1
Cadmium-109	1	.01
Cadmium-115m	1	.01
Cadmium-115	10 1	.1 01.
Calcium-47	10	.1
Carbon-14	100	1
Cerium-141	10	.1
Cerium-143 Cerium-144	10 .1	.1 001.
Cesium-131	100	.00
Cesium-134m	100	1
Cesium-134	.1	.001
Cesium-135	1 10	.01
Cesium-136 Cesium-137	.1	.001 .001
Chlorine-36	1	.01
Chlorine-38	100	1
Chromium-51	100	1
Cobalt-58m	100	.01
Cobalt-60	.1	.001
Copper-64	10	.1
Dvsprosium-165	100	1
Dysprosium-166 Erbium-169	10 10	.1
Erbium-171	10	.1
Europium-152 9.2 h	10	.1
Europium-152 13 y	.1	.001
Europium-154	.1 1	.001 01.
Fluorine-18	100	1
Gadolinium-153	1	.01
Gadolinium-159	10	.1
Gallium-72Germanium-71	10 100	.1
Gold-198	100	.1
Gold-199	10	.1
Hafnium-181	1	.01
Holmium-166	10	.1
Hydrogen-3Indium-113m	100 100	1
Indium-114m	100	.01
Indium-115m	100	1
Indium-115	1	.01
lodine-125lodine-126	.1	.001 .001
lodine-129	.1 .1	.00
lodine-131	.1	.001
lodine-132	10	.1
lodine-133	1	.01
lodine-134lodine-135	10 1	.1 .01
Iridium-192	1	.01
Iridium-194	10	.1
Iron-55	10	.1
Iron-59Krypton-85	1 100	.01
Krypton-87	100	.1
21	.5	